

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (Currently Amended): A dried hydrogel, prepared by polymerizing an olefinically unsaturated carboxylic acid or ~~an olefinically unsaturated carboxylic acid compound~~ its salts in a polymerization reaction mixture; admixing the polymerization reaction mixture, before, during or after the polymerization and before drying, with an alkali metal silicate of the general formula I



wherein M is an alkali metal and n is from 0.5 to 4;
thereby obtaining a hydrogel containing a polymer; and
drying said hydrogel at an elevated temperature, to obtain said dried hydrogel.

Claim 2 (Previously Presented): The dried hydrogel as claimed in claim 1, prepared by admixing said alkali metal silicate in an amount of from 0.05% by weight to 100% by weight, reckoned on SiO₂ and based on a total monomer weight.

Claim 3 (Previously Presented): The dried hydrogel as claimed in claim 1, prepared by admixing said alkali metal silicate in an amount of from 1% by weight to 70% by weight, reckoned on SiO₂ and based on a total monomer weight.

4. (Previously Presented) The dried hydrogel as claimed in claim 1, prepared by admixing said hydrogel after said polymerization with a mixture of an alkali metal

silicate and an alkali metal hydroxide, to thereby neutralize said polymer contained in said hydrogel.

5. (Previously Presented) The dried hydrogel as claimed in claim 1, prepared by admixing said hydrogel after said polymerization with a mixture of an alkali metal silicate and an alkali metal carbonate, to thereby neutralize said polymer contained in said hydrogel.

6. (Previously Presented) The dried hydrogel as claimed in claim 1, prepared by neutralizing said polymer contained in said hydrogel to a pH of from 3.5 to 9.0.

7. (Previously Presented) The dried hydrogel as claimed in claim 1, wherein a drying temperature is in the range from 40°C to 300°C.

8-9. (Cancelled)

Claim 10 (Currently Amended): A process for preparing a dried hydrogel particles, comprising:

polymerizing an olefinically unsaturated carboxylic acid or ~~an olefinically unsaturated carboxylic acid compound~~ its salts in a polymerization reaction mixture, to obtain a solid gel containing a polymer;

admixing the polymerization reaction mixture before or during the polymerization or admixing said solid gel with an alkali metal silicate of the general formula I



wherein M is an alkali metal and n is from 0.5 to 4;
thereby obtaining particles of a gel; and
drying said particles of the gel at an elevated temperature, to obtain said dried hydrogel particles.

Claim 11 (Previously Presented): A method for absorbing aqueous solutions, dispersions and emulsions, comprising:

contacting the dried hydrogel according to claim 1 with an aqueous solution, dispersion or emulsion.

Claim 12 (Previously Presented): An article, comprising:

the dried hydrogel according to Claim 1;

said article being capable of absorbing an aqueous fluid.

13. (Previously Presented) The dried hydrogel according to claim 1 which is capable of absorbing an aqueous fluid.

14. (Previously Presented) The dried hydrogel according to claim 1, wherein said olefinically unsaturated carboxylic acid is selected from the group consisting of acrylic acid, methacrylic acid, crotonic acid, 2-acryl-amido-2-methylpropanesulfonic acid, 2-acryl-amido-2-methylpropanephosphonic acid, vinylphosphonic acid and mixtures thereof; and

~~wherein said olefinically unsaturated carboxylic acid compound is selected from the group consisting of a vinylphosphonic monoester, a salt of a vinylphosphonic monoester, acrylamide, N-vinylamide, and mixtures thereof.~~

15. (Currently Amended) The dried hydrogel according to claim 1, which contains no post-crosslinker.

16. (Previously Presented) The dried hydrogel according to claim 1, wherein M in formula (I) is sodium.

17. (Previously Presented) The dried hydrogel according to claim 1, wherein M in formula (I) is potassium.

18. (Currently Amended) Dried hydrogel particles, prepared by polymerizing an olefinically unsaturated carboxylic acid or its salt ~~an olefinically unsaturated carboxylic acid compound~~ in a polymerization reaction mixture, to obtain a solid gel containing a polymer;
admixing said solid gel with an alkali metal silicate of the general formula I

$$M_2O \times n SiO_2 \quad (I),$$

wherein M is an alkali metal and n is from 0.5 to 4;
thereby obtaining particles of a gel; and
drying said particles of the gel at an elevated temperature, to obtain said dried hydrogel particles.

19. (New) The dried hydrogel according to claim 1, which is capable of absorbing aqueous fluids, thereby obtaining a swollen hydrogel.

20. (New) The dried hydrogel according to claim 1, wherein said polymer is water-insoluble.

21. (New) The dried hydrogel according to claim 1, wherein said polymer is a copolymer.

BASIS FOR THE AMENDMENT

Claim 15 has been amended to correct an obvious typographical as supported at page 1, lines 10-30 and at page 2, lines 15-19.

The claims have been amended as supported at page 3, lines 26-31 of the specification.

New Claim 19 has been added as supported at page 2, lines 15-27.

New Claim 20 is supported at page 1, lines 10 and 11.

New Claim 21 is supported by the Examples.

No new matter is believed to have been added by entry of this amendment.

Entry and favorable reconsideration are respectfully requested.

Upon entry of this amendment Claims 1-7 and 10-19 will now be active in this application.